

510,253

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
16 October 2003 (16.10.2003)

PCT

(10) International Publication Number
WO 03/085635 A2

- (51) International Patent Classification⁷: **G09G 3/28**
- (21) International Application Number: **PCT/IB03/01028**
- (22) International Filing Date: **19 March 2003 (19.03.2003)**
- (25) Filing Language: **English**
- (26) Publication Language: **English**
- (30) Priority Data:
02076387.6 **9 April 2002 (09.04.2002)** **EP**
- (71) Applicant (*for all designated States except US*): **KONINKLIJKE PHILIPS ELECTRONICS N.V. [NL/NL]**; Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).
- (72) Inventors; and
- (75) Inventors/Applicants (*for US only*): **HOLTSLAG, Antonius, H., M. [NL/NL]**; c/o Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL). **KLEIN, Markus, H. [DE/DE]**; c/o Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL). **KORT, Derk, A. [NL/NL]**; c/o Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL). **VOSEN, Franciscus [NL/NL]**; Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL).
- (74) Agent: **VAN DEN HOOVEN, Jan**; Internationaal Octrooibureau B.V., Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL).
- (81) Designated States (*national*): **AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.**
- (84) Designated States (*regional*): **ARIPO** patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), **Eurasian** patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), **European** patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), **OAPI** patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:**
— *without international search report and to be republished upon receipt of that report*
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

(54) Title: **PLASMA DISPLAY APPARATUS**

(57) **Abstract:** A plasma display apparatus comprises a waveform generator (WG) coupled between first and the second electrodes (SE1, CE1) to supply, across plasma cells (PCij), a sustain voltage (VCP) with slopes comprising a main part (MA) and a minor part (MI) succeeding the main part (MA). The main part has a duration longer than a formative time 5 lag (FTL) of the plasma cells (PCij), and the minor part has a smaller amplitude than the main part (MA). The plasma cells (pCij) are ignited and sustained by the minor part (MI). The main part (MA) has less steep slopes than the prior-art waveform. Consequently, the EMI produced by the main part (MA) will be at a lower frequency. The minor part (MI) has an amplitude which is relatively low and thus does not add considerably to the EMI, even 10 when its slopes are relatively steep. As the plasma is neither ignited nor sustained by the main part (MA), the main part (MA) further has a lower amplitude than the slope of the prior art and thus produces less EMI.

WO 03/085635 A2

